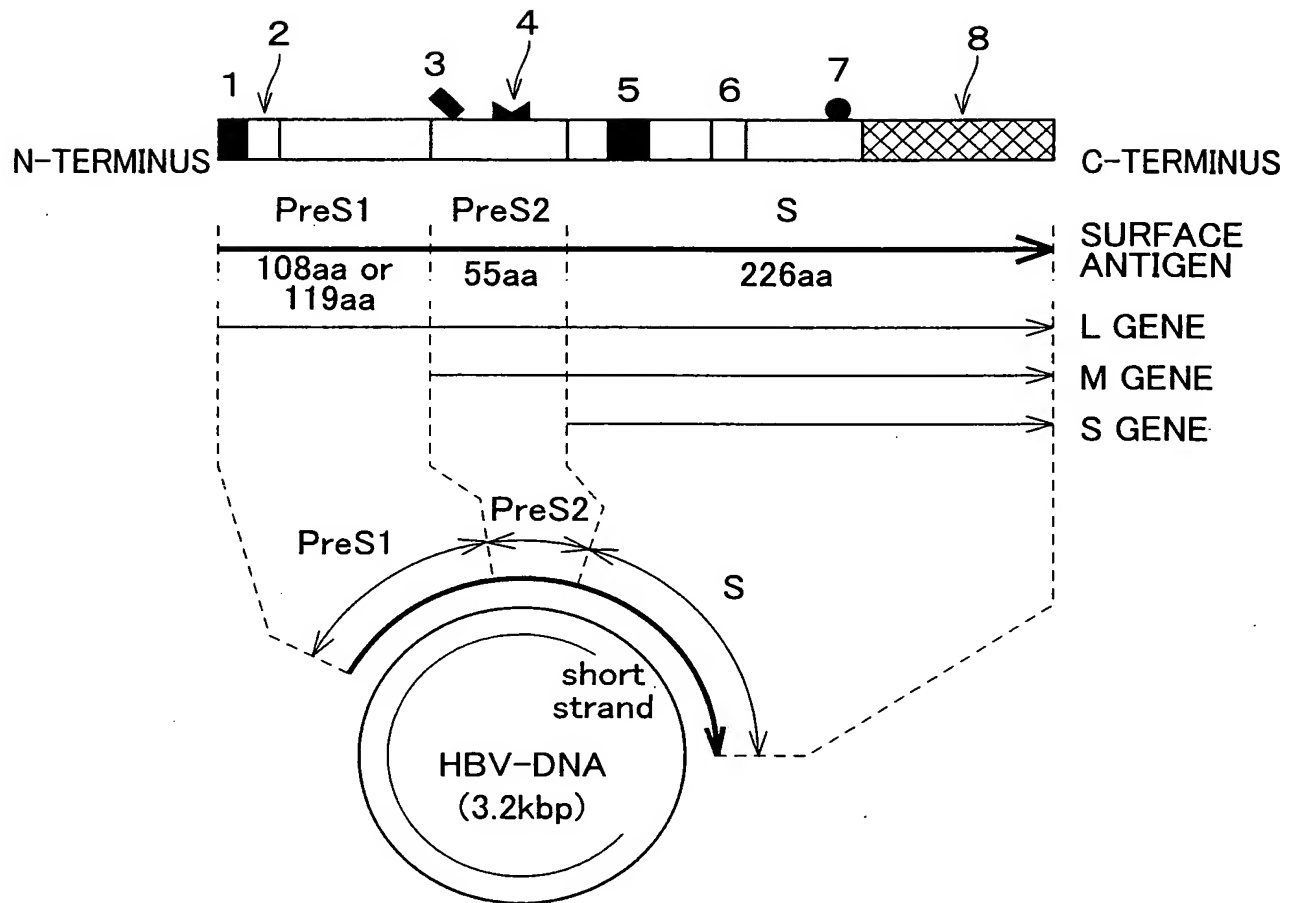
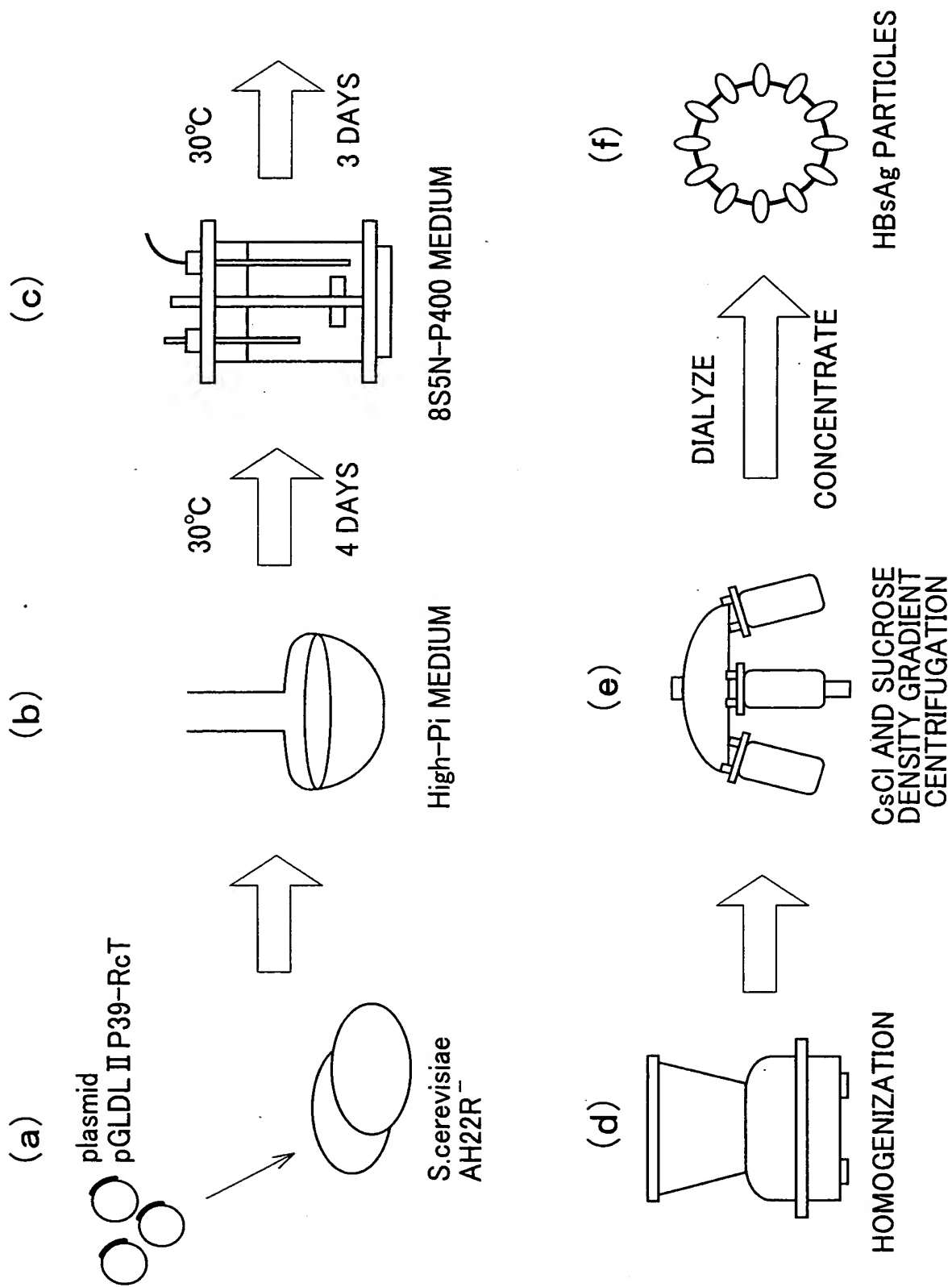


FIG. 1



- 1 PARTICLE FORMATION SUPPRESSING SITE
- 2 DIRECT RECEPTOR SPECIFIC TO HUMAN HEPATOCYTE
- 3 SUGAR CHAIN 1
- 4 INDIRECT RECEPTOR SPECIFIC TO HUMAN LIVER CELLS
(POLYMERIZED HUMAN SERUM ALBUMIN RECEPTOR)
- 5 TRANSMEMBRANE REGION 1
- 6 TRANSMEMBRANE REGION 2
- 7 SUGAR CHAIN 2
- 8 TRANSMEMBRANE REGION 3

FIG. 2



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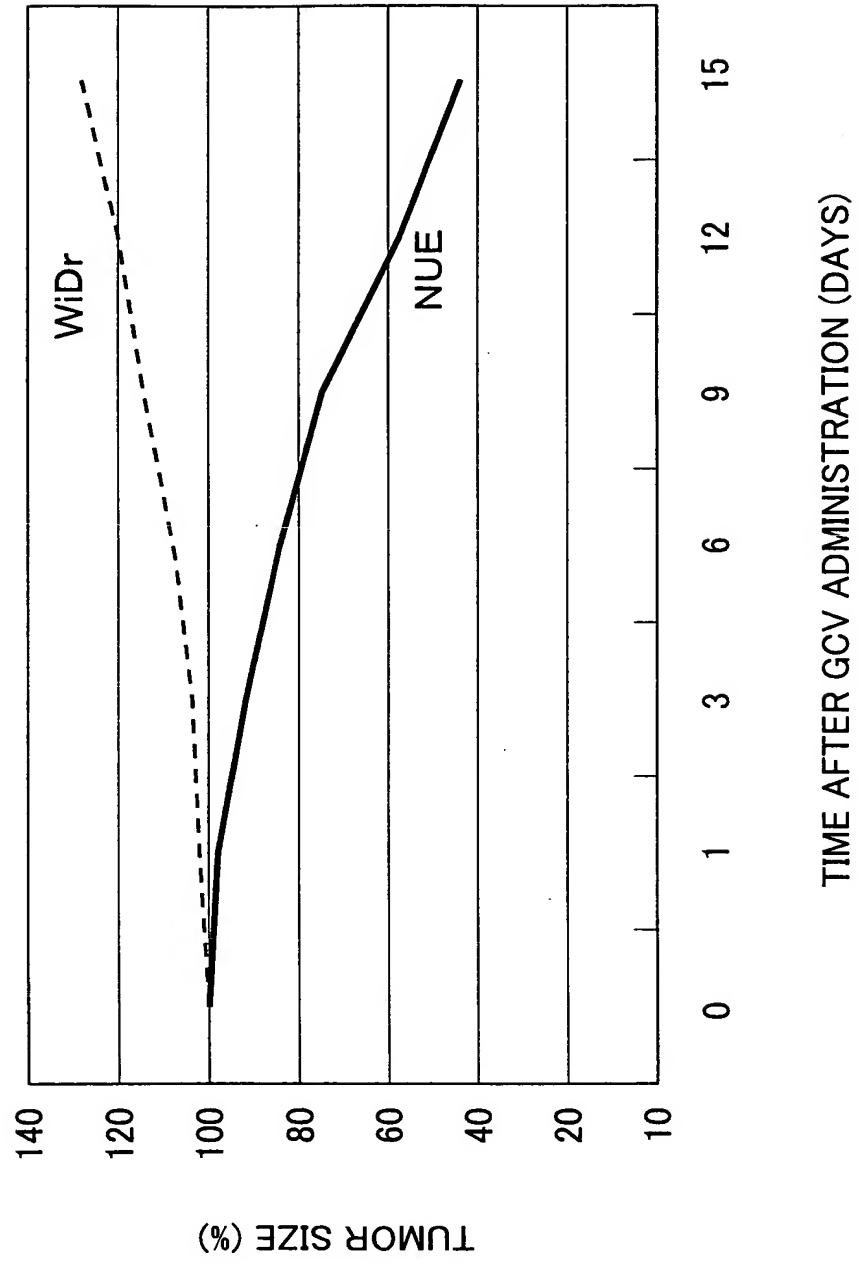


FIG. 3

FIG. 4

PROTEIN ATTACKING CYTOPLASMIC RNA SUCH AS RNase	Pancreatic type Rnases from vertebrates
	RNase 1 or Bovine RNase A
	Eosinophil derived neurotoxin
	Eosinophil cationic protein
	Liver RNase (RNase 4)
	Angiogenin
	Bovine seminal RNase
	Frog Rnases (Onconase etc.)
PROTEIN OBSTRUCTING TRANSMEMBRANE	Streptolysin(Streptococcus pyogenes)
	Cholesterol binding toxins (Streptococcus. Bacillus. Clostridium. Listeria)
	alpha-Toxin (Staphylococcus aureus)
	Delta-Toxin (Staphylococcus aureus) and melittin (Apis mellifera)
	Aerolysin (Aeromonas hydrophila)
	Escherichia coli hemolysin
PROTEIN OBSTRUCTING SIGNAL TRANSDUCTION	Cholera toxin (Vibrio cholerae)
	Heat-labile enterotoxins (Escherichia ColiD
	Pertussis toxin (Bordetella pertussis)
	Exoenzyme C3 (Clostridium botulinum)
	Adenylate cyclase toxin (Bordetella sp.)
	Anthrax edema factor (Bacillus anthracis)
PROTEIN OBSTRUCTING PROTEIN SYNTHESIS	Diphtheria toxin (Corynebacterium diphtheriae)
	Pseudomonas aeruginosa exotoxin A
	Shiga toxins (Shigella dysenteriae serotype I, Escherichia Coli)
	Ricin (Ricinus communis)
	Ribosome-inactivating proteins
	alpha-Sarcin and related toxins (Aspergillus)
PROTEIN DISTURBING CYTOSKELETON	C2 toxin (Clostridium botulinum type C and D)
	Cytotoxic necrotizing factors (Escherichia coli)
	Enterotoxin A and cytotoxin B (Clostridium difficile)
	ActA (Listeria monocytogenes)
	IcsA (Shigella flexneri)
	Zonula occludens toxin (Vibrio cholerae)

FIG. 5

PROTEIN SUPPRESSING IMMUNITY OR INFLAMMATORY REACTION	Pyrogenic exotoxins (superantigens) (<i>Staphylococcus aureus</i> and <i>Streptococcus pyogenes</i>)
	Anthrax lethal toxin (<i>Bacillus anthracis</i>)
	Leukocidins and gamma lysins (<i>Staphylococcus</i> sp.)
PROTEIN DISTURBING MEMBRANE TRANSPORT	Tetanus neurotoxin (<i>Clostridium tetani</i>)
	VAMP-specific botulinum neurotoxins
	Botulinum neurotoxins type A and E (<i>Clostridium botulinum</i>)
	Botulinum neurotoxin type C (<i>Clostridium botulinum</i>)
PROTEIN DISTURBING SODIUM CHANNEL	Vacuolating cytotoxin (<i>Helicobacter pylori</i>)
	alpha-Scorpion toxins
	beta-Scorpion toxins
	Excitatory insect selective neurotoxins from scorpion venoms
	Depressant insect selective neurotoxins from scorpion venoms
	mu-Conotoxins (<i>Conus geographus</i>)
	mu-Agatoxins (<i>Agelenopsis aperta</i>)
	Anthopleurin-A, -B, and -C (anemone toxin)
	Anemone toxins (type II)
PROTEIN DISTURBING POTASSIUM CHANNEL	Calitoxins
	Kalioxin
	Scyllatoxin (<i>Leiurus quinquestriatus hebraeus</i>)
	Apamin (honey bee <i>Apis mellifera</i>)
	MCD peptide (honey bee <i>Apis mellifera</i>)
	Charybdotoxin and iberiotoxin (<i>Leiurus quinquestriatus</i> var. <i>hebraeus</i> and <i>Buthus tamulus</i>)
	Margatoxin, noxiustoxin, and kalioxin (<i>Centruroides margaritatus</i> , <i>Centruroides noxius</i> , <i>Androctonus mauretanicus</i>)
	Dendrotoxins (<i>Dendroaspis</i> species)
	Sea anemone potassium channel toxins

FIG. 6

PROTEIN DISTURBING CALCIUM CHANNEL	Omega-Conotoxins (<i>Conus</i> spp.)
	Omega-Agatoxins (<i>Agelenopsis aperta</i>)
	Omega-Grammotoxin SIA (<i>Grammostola spatulata</i> Chilean pink tarantula)
	Hololena toxin (<i>Hololena curta</i>)
	PLTXII (<i>Plectreurys tristes</i>)
	Calciseptine (<i>Dendroaspis polylepis</i>)
	Calcicludeine (<i>Dendroaspis angusticeps</i>)
	beta-Leptinotarsin-h
	Taicatoxin (<i>Oxyuranus scutellatus scutellatus</i>)
PROTEIN DISTURBING ACETYLCHOLINE RECEPTOR	alpha-Bungarotoxin (<i>Bungarus multicinctus</i>)
	alpha-Cobratoxin (<i>Naja kaouthia</i>)
	Erabutoxins (<i>Laticauda semifasciata</i>)
	Toxin alpha (' <i>Naja nigricollis</i> ')
	kappa-Bungarotoxin (<i>Bungarus multicinctus</i>)
	alpha-Conotoxins (<i>Conus</i> spp.)
	Snake toxins against muscarinic acetylcholine receptors
	Muscarinic toxin-1~5, -7, m1-toxin from green mamba (<i>Dendroaspis angusticeps</i>)
	Muscarinic toxin-alpha, -beta from black mamba (<i>Dendroaspis polylepis</i>)
PROTEIN DISTURBING RYANODINE RECEPTOR CALCIUM ION CHANNEL	Helothermine (<i>Heloderma horridum horridum</i>)

FIG. 7

PROTEIN DISTURBING PRE-SYNAPSE	beta-Bungarotoxin (<i>Bungarus multicinctus</i>)
	Rattlesnake venom neurotoxins: crotoxin-related proteins
	Ammodytotoxins (<i>Vipera ammodytes ammodytes</i>)
	Notexins (<i>Notechis scutatus scutatus</i>)
	Textilotoxin (<i>Pseudonaja textilis textilis</i>)
	Tai poxin
	alpha-Latrotoxin (black widow spider)
	alpha-Latroinsectotoxin (<i>Latrodectus mactans tred ecimguttatus</i>)
	Pardaxin (<i>Pardachirus marmoratus</i>)
	Palytoxin (Corals of the spp. <i>Palythoa</i>)
	Equinatoxins (<i>Actinia equina</i> L., sea anemone)
PROTEIN DISTURBING GLUTAMIC ACID RECEPTOR	Conantokins (<i>Conus</i> spp.)

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FIG. 8

		TIME AFTER GCV ADMINISTRATION (DAYS)						
		0	1	3	6	9	1 2	1 5
TUMOR SIZE (%)	N U E	100	99	93	85	74	58	43
	W i D r	100	102	105	109	114	120	128